



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,366	12/22/2005	Torsten Kulke	TM/4-22906/A/PCT	3644
<div>324 7590 06/01/2007 CIBA SPECIALTY CHEMICALS CORPORATION PATENT DEPARTMENT 540 WHITE PLAINS RD P O BOX 2005 TARRYTOWN, NY 10591-9005</div>				
			EXAMINER NGUYEN, KHANH TUAN	
			ART UNIT 1751	PAPER NUMBER
			MAIL DATE 06/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,366

Applicant(s)

KULKE ET AL.

Examiner

Khanh T. Nguyen

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The preliminary amendment filed on 12/22/2005 is entered and acknowledged by the Examiner. Claims 1-14 are currently pending in the instant application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 05/22/2006 has been regarded by Examiner and made of record in the application file.

Specification

4. The disclosure is objected to because of the following informalities: The words "formulae" and "und" are misspelled on pages 2-5. Appropriate correction is required.

Claim Objections

5. Claims 1-14 are objected to because of the following informalities: The words "formulae" and "und" are misspelled. Appropriate correction is required.

Art Unit: 1751

6. Claim 8 is objected to because of the following informalities: Formula (6) is an emulsifier not a triazine group formula and does not contain R_7 and R_8 . For examining purposes, the examiner construed the reactive group of the cyclodextrin derivative is a triazine group of formula (8), wherein R_7 is chloride, and R_8 is a radical of formula $-OR_9$, wherein R_9 is hydrogen, alkali or C_1-C_8 . Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-5, 10 and 13-14 are rejected under 35 U.S.C. 102(b) as being unpatentable by Pegelow et al. (U.S. Pub. 2004/0031107 hereinafter "Pegelow").

With respect to claims 1 and 10, Pegelow discloses a textile cleaning material comprising of the host substances such as cyclodextrin and or cyclodextrin derivatives [0013]. The host substances are crosslink with dimethylolurea, dimethoxymethylurea, trimethoxymethylmelamine, tetramethoxymethylmelamine, hexamethoxymethylmelamine, dimethyloldihydroxyethyleneurea, dimethylolpropyleneurea, dimethylol-4-methoxy-5,5'-dimethyl-propylene-urea and/or dimethylol-5-hydroxypropylene-urea to form a two- or three-dimensional polymeric compound [0017]. The reference further discloses the textile cleaning material

Art Unit: 1751

comprising of water or water-miscible organic solvent and the mixture thereof and at least one surfactant [0081]. Suitable surfactants (i.e., emulsifiers) are nonionic, anionic, cationic, and amphoteric surfactants [0022]. Pegelow specifically discloses a fatty alcohol polyethylene glycol ethers surfactant formula (I) [0025-0026] that is similar to the claimed surfactant formula (6). The reference specifically or inherently meets each of the claimed limitations. The reference is anticipatory.

Regarding claim 2, Pegelow discloses a textile cleaning material comprising beta cyclodextrine [0013].

Regarding claim 3, Pegelow discloses a textile cleaning material comprising a reactive cyclodextrin derivative [0013].

Regarding claim 4, Pegelow discloses a textile cleaning material wherein host substance (e.g., beta-cyclodextrin) is present in an amount of 0.1 to 15% by weight, based on the total weight of the cleaning material [0018]. The disclose amount of cyclodextrin or cyclodextrin derivative lie inside the claim range, therefore the disclosure meets the instant claimed limitation.

Regarding claim 5, Pegelow discloses a textile cleaning material comprising of 0.1 to 15% by weight of beta-cyclodextrin or cyclodextrin derivative [0018] and 1.0 to 10 % by weight of surfactant based on the total weight of the cleaning material [0086]. The

Art Unit: 1751

disclose percent weight ratio of cyclodextrin or cyclodextrin derivative and surfactant lie within the molar ratio of cyclodextrin or cyclodextrin derivative and emulsifier as claimed.

Regarding claims 13-14, any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show the same process of making, see *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324. Burden is on applicants to show product differences in product by process claims, see *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Best*, 195 USPQ 430 (CCPA 1977); *In re Fessman*, 180 USPQ 324 (CCPA 1974); *In re Brown*, 173 USPQ 685 (CCPA 1972).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1751

10. Claims 6-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pegelow et al. (U.S. Pub. 2004/0031107) as applied to the above claims, and in view of Reuscher et al. (U.S. Pat. 5,728,823 hereinafter "Reuscher").

Pegelow is relied upon as set forth above. With respect to instant claim 6, Pegelow does not explicitly disclose a textile cleaning material wherein the reactive group of the cyclodextrin derivative is a nitrogen-containing heterocycle having at least one substituent selected from the group consisting of halogen and unsubstituted or substituted pyridinium.

In the same field of endeavor, Reuscher discloses the cyclodextrin derivatives contain at least one nitrogen-containing heterocycle having at least one electrophilic center (Col. 1 lines 41-43). The electrophilic center can be identical or different and are carbon atoms to which halogen, in particular F or Cl, or unsubstituted or substituted pyridinium is covalently bonded (Col. 1 lines 46-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have optimized the cyclodextrin derivatives as taught by Pegelow with the cyclodextrin derivatives that contain the nitrogen-containing heterocycle having a electrophilic center unsubstituted or substituted pyridinium as taught by Reuscher in order to provide chemical bonding between the cyclodextrin derivatives and the polymer or cellulose textile fiber.

Regarding claims 7-9, Reuscher further discloses the reactive group of the cyclodextrin derivative is a) a triazine group of formula (8) [See page 3] wherein R_7 is

Art Unit: 1751

fluorine, chlorine, unsubstituted or carboxy-substituted pyridinium or hydroxy, and R_8 is as defined above for R_7 or is a radical of formula $-OR_9$ or $--N(R_{10})R_{11}$, wherein R_9 is hydrogen, alkali, C_1 - C_8 alkyl which is unsubstituted or substituted by hydroxy or C_1 - C_4 alkoxy, and R_{10} and R_{11} , independently from each other, are hydrogen (Col. 4, lines 50-60); or b) a pyrimidinyl group of formula (9) [See page 4] wherein one of radicals R_{12} and R_{13} is fluorine or chlorine and the other one of radicals R_{12} and R_{13} is fluorine, chlorine, or is a radical of formula $-OR_9$ or $--N(R_{10})R_{11}$ as defined above, and R_{14} is C_1 - C_4 alkylsulfonyl, C_1 - C_4 alkoxysulfonyl, C_1 - C_4 alkoxycarbonyl, C_2 - C_4 alkanoyl, chlorine, nitro, cyano, carboxyl or hydroxyl (Col. 3, lines 45-60); or c) a dichloroquinoxaline group of formula (10) [See page 4] (Col. 4, lines 10-15).

Regarding claim 11, Pegelow discloses the host substances are crosslink with crosslinking agent such as dimethylolurea, dimethoxymethylurea, trimethoxymethylmelamine, tetramethoxymethylmelamine, hexamethoxymethylmelamine, dimethyloldihydroxyethyleneurea, dimethylolpropyleneurea, dimethylol-4-methoxy-5,5'-dimethyl-propylene-urea and/or dimethylol-5-hydroxypropylene-urea [0017]. However, Reuscher does not disclose a bonding agents selected from the group consisting of acrylates, silicones, urethanes and butadienes.

In the same field of endeavor, Reuscher discloses cyclodextrin derivative are preferably bonded to polymer (Col. 9, lines 33-34). An example of synthetic polymer is

Art Unit: 1751

silicones (Col. 10, line 45). Note. The examiner construed a bonding agent to be a polymer.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have optimized the chemical bonding between the cyclodextrin derivatives and substrate by incorporating a crosslinking agent as taught by Pegelow along with a bonding polymer as taught by Reuscher.

Regarding claim 12, Reuscher further discloses the composition comprising of a buffer selected from the group consisting of phosphates, carbonates, acetates and citrates (Col. 6, lines 50-57).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KTN
Examiner
05/22/2007



Mark Kopec
Primary Examiner